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(54) Title: **QUEUE MANAGEMENT IN PACKET SWITCHED NETWORKS**

(57) Abstract

In a multipoint-to-point link, packets (T) are transmitted over a shared medium to a central node (10) in response to permits (TP). The central node (10) issues permits to a multipoint node (20) on the basis of a queue size record (11) held at the central node. The queue record is updated on receipt of a queue size report (request for permits) (RP) from the multipoint node. Due to the transmission delays across the link, an erroneous queue value can be recorded at the central node when permits and a request for permits are sent at about the same time. This problem is overcome and the transfer capacity improved when the central node holds a record of the permits sent during the preceding round trip delay. Any incoming request for permits is then adjusted by the number of stored permits before it is utilised to update the queue record.

